

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/709,554	05/13/2004	Samuel Tocalino	68.0397	3553
35204	7590 09/06/2006		EXAMI	NER
SCHLUMBERGER RESERVOIR COMPLETIONS			HARCOURT, BRAD	
14910 AIRLINE ROAD ROSHARON, TX 77583			ART UNIT	PAPER NUMBER
			3672	
	\cdot		DATE MAILED: 09/06/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/709,554	TOCALINO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Brad Harcourt	3672				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.15 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was a failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	I. hely filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	,					
·	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-21 is/are pending in the application.	☐ Claim(s) 1-21 is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
)⊠ Claim(s) <u>20 and 21</u> is/are allowed.						
6)⊠ Claim(s) <u>1-11 and 14-17</u> is/are rejected.						
7)⊠ Claim(s) <u>12,13,18 and 19</u> is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r					
10)⊠ The drawing(s) filed on <u>5/13/2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).						
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
	priority under 35 LLS C & 110(a)	(d) or (f)				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
·- <u>-</u>	a)					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
A44.a.b						
Attachment(s)	∧ □					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Linterview Summary (Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal Pa	atent Application (PTO-152)				
Paper No(s)/Mail Date <u>2/10/2005</u> . 6) Other:						

Application/Control Number: 10/709,554

Art Unit: 3672

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: system 10. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Rickey (US Patent No. 4,646,839).

Rickey discloses a gravel packing apparatus 25 comprising work string 10; pistons 25b and 25c that act as plugs and separate fluid above the plugs from fluid below; locking recess 15e that acts as a plug catcher and has an internal profile to

Art Unit: 3672

arrest movement of the apparatus; outlet 21a that acts as a crossover, and well screen 24 mounted below outlet 21a. Pistons 25b and 25c facilitate movement of the entire apparatus up or down the work string by fluid pressure applied to them while still sealingly engaging the wellbore. In reference to claim 9, the slurry is pumped through apparatus 25 and into central conduit 25a that is below the plug assembly 25b and 25c.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rickey (US Patent No. 4,646,839) in view of Dotson (US Patent No. 4,577,689).

Rickey discloses all of the limitations of the claims above with the exception of a plug head in which the plug initially resides. However, Dotson discloses a method of determining fracture pressure comprising a borehole 20; casing 21; a slidable plug 24; and a plug head 17 that initially stores plug 24. It would have been obvious to a person having ordinary skill in the art at the time of the invention to include a plug head on the gravel packer of Rickey in view of Dotson to provide an apparatus for the plug to inject the plug into the well bore.

Claims 3-6, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rickey (US Patent No. 4,646,839) in view of Tessier (US Patent No. 6,951,246).

Application/Control Number: 10/709,554

Art Unit: 3672

Rickey discloses all of the limitations of the above claims with the exception of using a plug including ribs and a frangible diaphragm. Tessier discloses a cementing plug 10 disposed in production casing 15 comprising wipers 25; core 20; bore 21; and top end of core 22 includes a rupture diaphragm 23 which ruptures at "a predetermined pressure" (co.4, lines 15-16). All external portions of core 20 and wipers 25 are covered with elastomeric covering 24. While the plug is disclosed for usage in a cementing operation, it is structurally the same and functions in substantially the same manner as a plug that would be used in a gravel packing operation. In reference to claims 17 and 19, the plug diaphragm inherently would be designed to rupture after its motion was halted by the plug catcher, otherwise it would cease to function before the operation commenced. It would have been obvious to a person having ordinary skill in the art at the time of the invention to include a rupturable plug on the gravel packer tool of Rickey in view of Tessier to allow fluids to eventually pass through a plug after the gravel packing is complete.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rickey (US Patent No. 4,646,839) in view of Tessier (US Patent No. 6,951,246) as applied to claims 3-6, 11, 16 and 17 above, and further in view of Dotson (US Patent No. 4,577,689).

The references from Rickey, Tessier and Dotson apply similarly as above.

Rickey and Tessier disclose all of the limitations of the claims with the exception of utilizing a plug head to inject the plug into the well bore. The plug head 17 of Dotson includes three valves to regulate the fluid entering the wellbore. It would have been

Application/Control Number: 10/709,554

Art Unit: 3672

obvious to one having ordinary skill in the art at the time of the invention to include the plug head on the gravel packer of Rickey in view of Tessier and in further view of Dotson to provide the apparatus with a means to inject the plug and to control fluid or slurry entering the well bore.

Allowable Subject Matter

Claims 12-13 and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 20 and 21 allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chancellor (US Patent No. 3,464,493) discloses a similar gravel packer but also fails to teach using a plug head that the plugs reside inside of initially. LaFleur (US Patent No. 5,433,270) discloses a similar cementing plug with ribs and a rupturable disc.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad Harcourt whose telephone number is 571-272-7303. The examiner can normally be reached on Monday through Friday from 8:30 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Bagnell

Supervisory Patent Examiner

Art Unit 3672

BH 8/24/06